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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/944,174

09/04/2001

Stefan Wahl

Q65929

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04/17/2006

SUGHRUE, MION, ZINN,  
MACPEAK & SEAS, PLLC  
2100 Pennsylvania Avenue, N.W.  
Washington, DC 20037-3213

EXAMINER

HARPER, KEVIN C

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 04/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/944,174

Applicant(s)

WAHL ET AL

Examiner

Kevin C. Harper

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 January 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-18 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-11 and 13 is/are rejected.
- 7) ☒ Claim(s) 5 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

***Response to Arguments***

Applicant's arguments, filed January 30, 2006 with respect to the polling message of the Chapman reference have been fully considered and are persuasive. The previous rejection of these claims has been withdrawn. However, upon further consideration of claims 1-13, a new ground(s) of rejection is made in view of Eng in view of Moura.

Applicant's arguments with respect to the acknowledgement message of Chapman have been fully considered but they are not persuasive.

1. Applicant argued that the acknowledgement message is not a data packet. However, the acknowledgement message contains control data. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a data packet does not carry control information) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
2. Applicant argued that the content of the acknowledgement message is related to the interruption of the polling message. However, the content of the acknowledgement does not indicate that the polling should be interrupted (see applicant's remarks, September 12, 2005, page 15, last paragraph, "only when the contents of the signal... is a request to stop polling"), but only is a response indicating that a polling message has been received (Chapman, col. 3, lines 31-33).

Applicant's arguments with respect to the Eng reference have been fully considered but they are not persuasive.

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3. Applicant argued that Eng does not disclose a first time period shorter than a second time period that adjoins the first time period, where no transmit authorizations are sent to the second device in the second time period. However, in Eng a transmit authorization is sent for one mini-slot (fig. 2; col. 3, lines 49-50; col. 11, lines 27-29). The first time period represents the time that a transmit authorization is sent to the second device. Transmit authorizations are sent for the mini-slots corresponding to the remaining devices (col. 3, lines 49-50). The second time period represents the time that these transmit authorizations are sent (figs. 2 and 6). Therefore, the first time period is shorter than the second time period, the first time period adjoins the second time period, and no transmit authorizations are sent in the second time period for the second device.

4. Applicant argued that Eng does not disclose the limitations of claim 13. However, it appears that the first device is a terminal device and the second device is a controlling device (see claim objection below).

### ***Claim Objections***

5. Claim 13 is objected to because “first” in line 1 and “second” in line 3 should be interchanged (specification, page 3, lines 6-13). The second device transmits the transmit authorizations in claim 1 which disclosed as the control center in the specification. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-4, 6-11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eng (US 5,963,557) in view of Moura et al. (US 5,818,845).

1. Regarding claims 1-2 and 7-11, Eng discloses a method of sending a data packet from a first device (fig. 7, item 112) to a second device (one of item 150). The method comprises repeatedly sending the authorization to the first device from the second device when a data packet is expected (col. 3, lines 48-50; col. 11, lines 27-29) and transmitting a data packet from the first device to the second device following the reception of the transmit authorization (col. 4, lines 23-26). The data packet is a communication data information (col. 4, lines 25-26). Further regarding claims 7-8, the first device is a control unit of a control center having a head end of an HFC system (fig. 1).

2. However, Eng does not disclose transmitting two transmit authorizations and interrupting the transmission of transmit authorizations when the data packet is received. Moura discloses sending several transmit authorizations to one device (col. 10, lines 30-33). The transmission of the transmit authorizations is automatically interrupted when a data packet is received (col. 10, lines 24-29). The contents of the data packet are unrelated to the interruption of the transmit authorizations (col. 9, lines 51-55). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to send more than one transmit authorization to a device in the invention of Eng in order to determine the state of a subscriber station (fig. 7).

3. Regarding claim 4, Eng discloses a method of sending a transmit authorization from a first device (fig. 7, item 112) to a second device (one of item 150). The method comprises sending the authorization to the second device in a first time period (col. 3, lines 48-50; col. 11, lines 27-29; note: time period for a mini-slot), wherein the first time period is shorter than a

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second time period which adjoins the first time period and in which no transmit authorizations are sent to the second device (fig. 2; note: transmit authorizations are sent to one device for one assigned mini-slot and then sent to other devices for other mini-slots during which time no transmit authorizations are sent to the first device).

4. However, Eng does not disclose sending several transmit authorizations to one device. Chapman discloses sending several transmit authorizations to one device (fig. 4, steps 130-136). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to send more than one transmit authorization to a device in the invention of Eng in order to ensure receipt of a control message (Chapman, col. 4, lines 33-40).

5. Regarding claims 3 and 6, in Eng several subscriber stations are sent transmit authorizations and transmit data packets (fig. 2), where the subscriber stations transmit in different time slots (col. 4, lines 23-26).

6. Regarding claim 13, in Eng the first device is a control and the second device is a terminal (fig. 2).

#### ***Allowable Subject Matter***

7. Claims 14-18 allowed.

8. Claims 5 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 571-272-3166. The examiner can normally be reached weekdays from 11:00 AM to 7:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To, can be reached at 571-272-7629. The centralized fax number for the Patent Office is 571-273-8300. For non-official communications, the examiner's personal fax number is 571-273-3166 and the examiner's e-mail address is kevin.harper@uspto.gov.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications associated with a customer number is available through Private PAIR only. For more information about the PAIR system, see portal.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin C. Harper

April 17, 2006